

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 August 2005 (25.08.2005)

PCT

(10) International Publication Number
WO 2005/078706 A1

(51) International Patent Classification⁷: **G10L 19/04,**
19/12

[CA/CA]; 1546 Perodeau, Rock Forest, Québec J1N 1L2
(CA).

(21) International Application Number:
PCT/CA2005/000220

(74) Agents: **PRINCE, Gaétan** et al.; BCF LLP, 1100 René-
Lévesque Blvd. West, 25th Floor, Montréal, Québec H3B
5C9 (CA).

(22) International Filing Date: 18 February 2005 (18.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2,457,988 18 February 2004 (18.02.2004) CA

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(71) Applicant (for all designated States except US):
VOICEAGE CORPORATION [CA/CA]; 750 chemin
Lucerne, Suite 250, Ville Mont-Royal, Québec H3R 2H6
(CA).

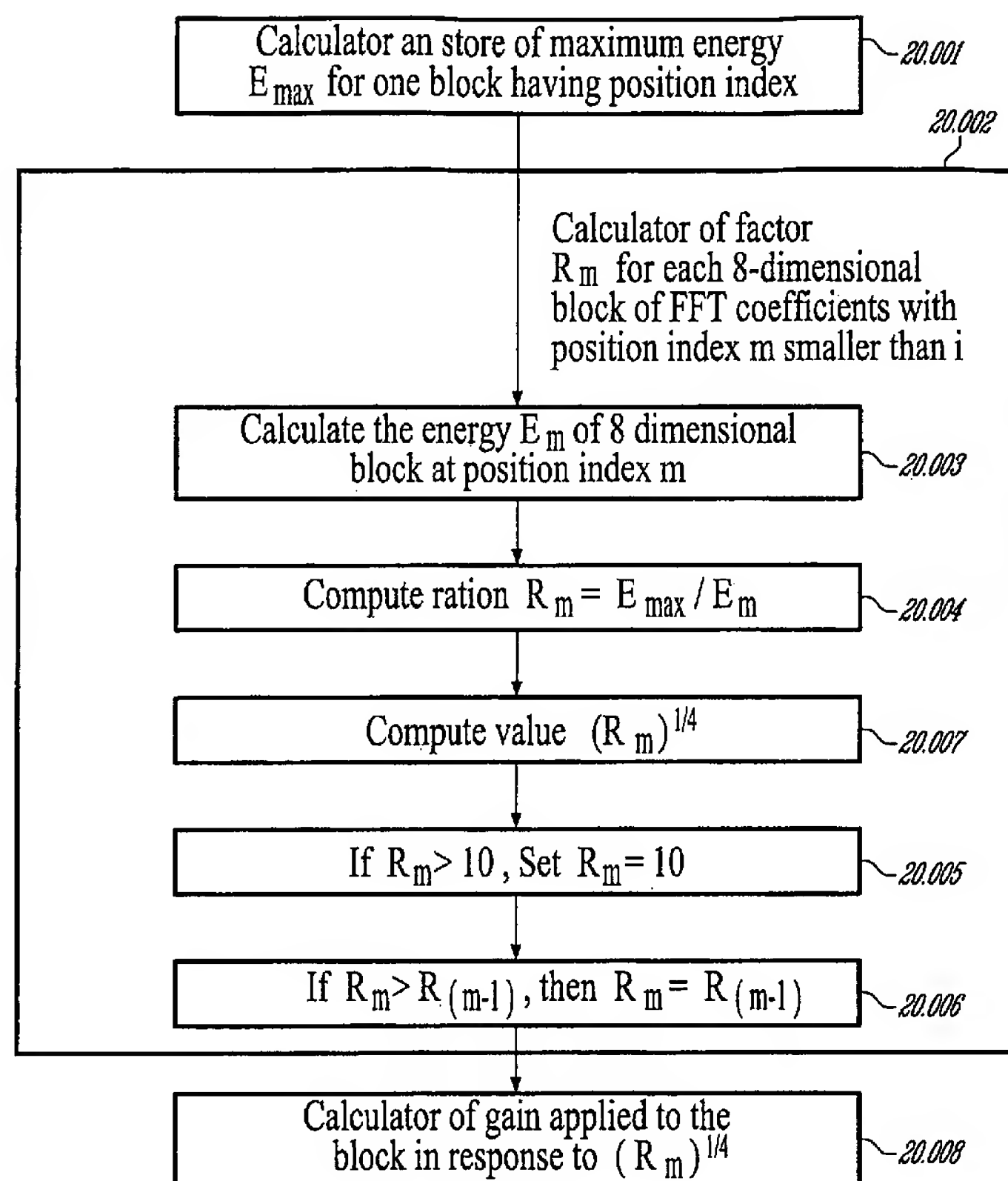
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BESSETTE, Bruno**

[Continued on next page]

(54) Title: METHODS AND DEVICES FOR LOW-FREQUENCY EMPHASIS DURING AUDIO COMPRESSION BASED ON
ACELP/TCX



(57) Abstract: An aspect of the present invention relates to a method for low-frequency emphasizing the spectrum of a sound signal transformed in a frequency domain and comprising transform coefficients grouped in a number of blocks, in which a maximum energy for one block is calculated and a position index of the block with maximum energy is determined, a factor is calculated for each block having a position index smaller than the position index of the block with maximum energy, and for each block a gain is determined from the factor and is applied to the transform coefficients of the block.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*